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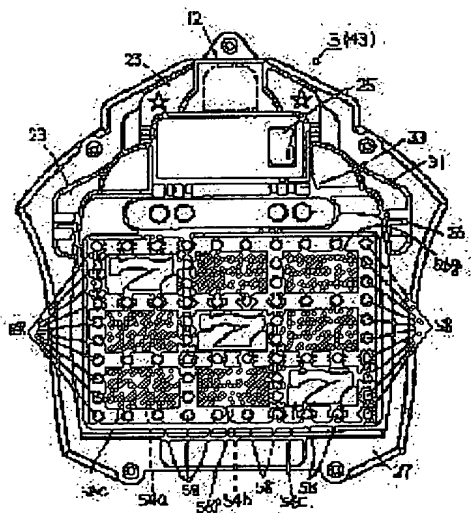
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(54) GAME MACHINE



(57)Abstract:

**PURPOSE:** To provide a game machine which ensures higher expectation from a player in a type which stops or controls a plurality of variable display sections differentiating the period of stoppage thereof.

**CONSTITUTION:** A variable display device 3 is made to vary display and a plurality of variable display sections are stopped or controlled differentiating the period of stoppage based on the holding of specified stopping conditions. Liquid crystal display parts 56a-56i each comprising a liquid crystal sheet are provided. The sheet is adapted to shield a variable display part to block visual recognition thereof other than those on a combination effective sequence to which the variable display part belongs to satisfy establishing conditions, when the variable display part stopped satisfies combination establishing conditions of specified identification information at a stage where a variable display is still at some of the plurality of variable display parts.

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**CLAIMS**

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[Claim(s)]

[Claim 1] It has two or more adjustable displays which are characterized by providing the following and which can adjustable display two or more kinds of identification information. The adjustable display which was defined beforehand and with which it combined and the effective train was defined two or more is prepared, and by the display result of two or more aforementioned adjustable displays at the time of a halt of this adjustable display The game machine which will be in the state which can give predetermined game value when the combination of the aforementioned specific identification information is organized on a certain combination effective train of two or more aforementioned combination effective trains The aforementioned adjustable display is indicated by adjustable, two or more aforementioned adjustable displays change a halt stage based on formation of a predetermined condition precedent, and it is the adjustable display-control means in which halt control is possible. A cover means to cover in the state where the identification information displayed by adjustable displays other than the adjustable display on the combination effective train to which the adjustable display which fulfills these formation conditions belongs cannot be checked by looking when the stopped adjustable display is filling the formation conditions of the combination of the aforementioned specific identification information with the stage in which a part of two or more aforementioned adjustable displays are still indicating by adjustable

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[Translation done.]

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**DETAILED DESCRIPTION**

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[Detailed Description of the Invention]

[0001]

[Industrial Application] this invention relates to the game machine represented with a pachinko game machine, a coin game machine, or a slot machine. When it has in detail two or more adjustable displays which can adjustable display two or more kinds of identification information, the adjustable display which was defined beforehand and with which it combined and the effective train was defined two or more is prepared and the combination of the aforementioned specific identification information is organized on a certain combination effective train of two or more aforementioned combination effective trains by the display result of two or more aforementioned adjustable displays at the time of a halt of this adjustable display, it is related with the game machine which will be in the state which can give predetermined game value.

[0002]

[Description of the Prior Art] In this kind of game machine, to what is generally known from the former, for example Two or more adjustable displays are arranged in lengthwise and a longitudinal direction by the shape of a matrix, and the adjustable display with which two or more combination effective trains were defined on a longitudinal direction and the slanting diagonal line is prepared. by the display result at the time of a halt of the adjustable display When the combination of specific identification information was organized on a certain combination effective train among two or more aforementioned combination effective trains, there were some which were constituted so that it may be in the game state which can give a game person predetermined game value. And the aforementioned adjustable display was indicated by adjustable, based on formation of a predetermined condition precedent, the halt stage was changed one by one, halt control of two or more aforementioned adjustable displays was carried out, it displayed that formation of the combination of the aforementioned specific identification information was gradually approached by gradual halt control of an adjustable display, and some which were constituted so that a game person's hope might be raised gradually and it might finally raise even to a big hope were.

[0003]

[Problem(s) to be Solved by the Invention] However, in this kind of conventional game machine, two or more adjustable displays change halt time, and halt control is carried out. Though the adjustable display stopped in the stage in which a part of two or more of the adjustable displays are still indicating by adjustable fulfills the formation conditions of the combination of the aforementioned specific identification information A game person may be unable to judge easily whether possibility that the combination of the aforementioned specific identification information will be organized on which combination effective train since there are two or more combination

effective trains is increasing from the display result of the adjustable display which is carrying out [ aforementioned ] a halt. There was a fault that the case where a game person's hope cannot be raised gradually arose.

[0004] this invention is invented in view of the starting actual condition, and the purpose is offering the game machine which two or more adjustable displays' change halt time, and can raise a game person's hope more certainly in the thing in which halt control is possible.

[0005]

[Means for Solving the Problem] Have two or more adjustable displays which can adjustable display two or more kinds of identification information, and the adjustable display which was defined beforehand and with which it combined and the effective train was defined two or more is prepared, and this invention by the display result of two or more aforementioned adjustable displays at the time of a halt of this adjustable display When the combination of the aforementioned specific identification information is organized on a certain combination effective train of two or more aforementioned combination effective trains It is the game machine which will be in the state which can give predetermined game value, the aforementioned adjustable display is indicated by adjustable, and two or more aforementioned adjustable displays change halt time based on formation of a predetermined condition precedent. The adjustable display-control means in which halt control is possible, When the stopped adjustable display is filling the formation conditions of the combination of the aforementioned specific identification information with the stage in which a part of two or more aforementioned adjustable displays are still indicating by adjustable It is characterized by including a cover means to cover in the state where the identification information displayed by adjustable displays other than the adjustable display on the combination effective train to which the adjustable display which fulfills these formation conditions belongs cannot be checked by looking.

[0006]

[Function] According to this invention, an adjustable indication of the adjustable display is given by work of an adjustable display-control means, and after halt time has differed [ two or more adjustable displays ] based on formation of a predetermined condition precedent, it is controlled possible [ a halt ]. By work of a cover means in furthermore, the stage in which a part of two or more adjustable displays are still indicating by adjustable Since it will be in the state where adjustable displays other than the adjustable display on the combination effective train to which the adjustable display which fulfills the formation condition belongs cannot be checked by looking when the stopped adjustable display fulfills the formation conditions of the combination of the aforementioned specific identification information A game person can judge now easily from the display result of the adjustable display which is carrying out [ aforementioned ] a halt of whether possibility that the combination of the aforementioned specific identification information will be organized on which combination effective train remains.

[0007]

[Example] Next, the example of this invention is explained in detail based on a drawing. In addition, in this example, although a pachinko game machine is taken up and explained as an example of a game, if this invention is the game machine with which the adjustable display which has two or more adjustable displays which can adjustable display two or more kinds of identification information was prepared, it is good [ they may be for example, not only this but a coin game machine, a slot machine, etc., and ] anything.

[0008] Drawing 1 is the front view showing the game face of a board of the pachinko game machine of an example of a pinball machine. If the hit ball operation handle which a game person does not illustrate is operated, every one pachinko ball currently stored by hit ball \*\*\*\*\* (not

shown) will be driven in in the game field 2 currently formed in the front face of the game board 1. While the adjustable display 3 which can adjustable display two or more kinds of identification information is formed, the starting winning-a-prize mouths 10a, 10b, and 10c are formed in the game field 2. Each of starting winning-a-prize mouths 10a and 10b of these and the pachinko ball which won a prize in 10c are detected by each with the starting winning-a-prize ball detectors 11a, 11b, and 11c (11b and 11c are not shown). Based on the detecting signal of the starting winning-a-prize ball detector, the adjustable start of each pattern displays 3a, 3b, and 3c of the aforementioned adjustable display 3 is carried out. And if left figure handle display 3a stops first based on progress of a predetermined time, pattern display 3in after that b stops, right figure handle display 3c finally stops and the display result at the time of a halt becomes the specific identification information (for example, 777) defined beforehand Kaisei of the opening-and-closing board of adjustable winning-a-prize sphere equipment 4 is carried out, and for a game person, it considers as the 1st advantageous state and changes into the state which can give predetermined game value. If a pachinko ball wins a prize of the starting winning-a-prize mouths 10a-10c during the adjustable display of the adjustable display 3, after memorizing the starting winning a prize and turning off the adjustable display of the adjustable display 3, based on the storage, the adjustable start of the adjustable display 3 is carried out again. The upper limit of the starting winning-a-prize storage is set to "4." The number of times of starting winning-a-prize storage is displayed by the starting storage Light Emitting Diode 26.

[0009] Although it is in the 2nd disadvantageous state for the game person by which, as for adjustable winning-a-prize sphere equipment 4, opening 7 is sometimes usually blockaded with the opening-and-closing board 5 on the other hand, and a pachinko ball cannot win a prize of opening 7, when the opening-and-closing board 5 carries out Kaisei, it will be in the 1st state advantageous to the game person by which a pachinko ball can win a prize of opening 7. The 1st state of adjustable winning-a-prize sphere equipment 4 is ended when conditions are satisfied by the way [ winning a prize of the predetermined number (for example, ten pieces) of a pachinko ball or progress of a predetermined time (for example, for 30 seconds) is early either ], and adjustable winning-a-prize sphere equipment 4 switches to the 2nd state. The specific winning-a-prize mouth 8 is formed in the predetermined part in opening 7, on the other hand, if the pachinko ball which won a prize of adjustable winning-a-prize sphere equipment 4 wins a prize of this specific winning-a-prize mouth 8, after completing the 1st state of the adjustable winning-a-prize sphere equipment 4 in the time and being in the Kaisei state, Kaisei of the opening-and-closing board 5 will be carried out again, and continuation control of the 1st state is carried out repeatedly. The number of times of an upper limit of this recurrence continuation control is determined as 16 times. The number of times of Kaisei to which Kaisei of the number of times 5, i.e., opening-and-closing board, with which this recurrence continuation control was performed was carried out is displayed by the number-of-times drop 25 of Kaisei. Furthermore, the number of the winning-a-prize ball which won a prize of this adjustable winning-a-prize sphere equipment 4 is displayed by the winning-a-prize number drop 9. In addition, six in drawing is a solenoid and is for carrying out the opening-and-closing drive of the opening-and-closing board 5.

[0010] As the 2nd state of this adjustable winning-a-prize sphere equipment 4, you may be in not the state where a hitted ball cannot win a prize at all but a state with difficult winning a prize of a hitted ball.

[0011] In the adjustable display 3, the drum lamps 22a-22i are formed, and by switching on the light or blinking, it is constituted so that the identification information displayed by each pattern displays 3a-3c can be displayed brightly. Furthermore, while trim Light Emitting Diode 23 is formed, the winning-a-prize mouth 12 is formed in this adjustable display 3. In this example, although the adjustable display of a rotating-drum formula is shown, this invention may be the adjustable display

of the digital formula which used the liquid crystal display and light emitting diode of not only this but the shape of the shape for example, of a segment, or a matrix, the electroluminescence, etc., and when two or more lamps etc. carry out run lighting, it may perform an adjustable display.

Furthermore, the pattern displays 3a-3c may be not only three but two or four things or more.

furthermore, the inside of progress of a predetermined time or press operation of a game person's earth switch -- either -- based on the earlier one having been performed, you may carry out halt control [ \*\*\*\* / stopping the adjustable display of this adjustable display by press operation of a game person's earth switch (not shown) ]

[0012] The wind-mill lamp 18, the winning-a-prize mouths 13 and 14, the side lamp 17, and the shoulder lamp 19 are further formed in the game field 2. The attacker lamp 21, the attacker Light Emitting Diode 24, and the sleeve lamp 20 are formed in right and left of adjustable winning-a-prize sphere equipment 4. 16 are a rail trim lamp among drawing, and 15 is an out mouth which collects out balls.

[0013] Drawing 2 is the front view showing the whole adjustable display 3. The adjustable display 3 is constituted by forming the drum unit 46 in the rear of the drum ornament unit 43 (refer to drawing 4 ). The attachment substrate 27 to which gold plate processing was performed is formed in the adjustable display 3, and the adjustable display 3 is attached in the face of a board of the game board 1 by this attachment substrate 27. The inside 54a, 54b, and 54c of drawing is the drum seal stuck on the peripheral face of each drums 53a, 53b, and 53c (refer to drawing 3 ), and when a drum rotates, an adjustable indication of the identification information displayed with the drum seals 54a-54c is given. Although the inside 56a-56i of drawing is in the light-transmission state in the state of the usual adjustable display so that it may be the liquid crystal display section and may mention later When possibility that the combination (for example, 777) of specific identification information will be organized judging from the halt pattern after the left figure handle and the inside pattern have stopped remains (the so-called reach state) The liquid crystal display sections (56b-56d, 56f-56h) other than the liquid crystal display section on the combination effective train (hit line) in which the possibility remains switch to an optical cut off state. Moreover, set the hit line drop (hit train Light Emitting Diode) 58 corresponding to the combination effective train in which the aforementioned possibility remains by the halt timing of right drum 53c, and the light is made to switch on in right order into the left at the time of this reach, and when the combination (for example, 777) of specific identification information is organized, the turned-on hit line drop (hit train Light Emitting Diode) 58 is switched to a blink state. In addition, you may carry out lighting movement of the hit line drop (hit train Light Emitting Diode) 58 turned on when the combination (for example, 777) of specific identification information is organized. In addition, the hit line drops 58 are things other than Light Emitting Diode, and may be constituted, and the number of a combination effective train (hit line) is not limited to an example (5). Moreover, you may use a combination effective train (hit line) as the mountain type and V character type instead of the shape of a straight line. the starting storage Light Emitting Diode 26 is formed in the upper part position of these liquid crystal display sections 56a-56i, and gold plate processing was further performed to the upper part position -- covering -- a member -- the trim 33 is formed The right-and-left position of the winning-a-prize mouth 12 is decorated, and Light Emitting Diode 23 is formed in the right-and-left position row of the starting winning-a-prize storage Light Emitting Diode 26. In addition, 25 is a number-of-times drop of Kaisei, and 31 is protruded and covered ahead and is a member.

[0014] Drawing 3 is drawing of longitudinal section of the adjustable display in the state where it was attached to the game board. The drum ornament unit 43 (refer to drawing 4 ) is attached in the front face of the game board 1 by the attachment substrate 27 at attachment opening 1a formed in the game board 1. It bulged and covers to a front-face side, and the member 31 is formed in the

upper part portion of a drum ornament unit. In addition, 55a in drawing 4 is an inside glass plate, and 55b is an outside glass plate. This winning-a-prize ball that it covers, and the winning-a-prize mouth 12 is formed in the member 31, and won a prize of this winning-a-prize mouth 12 is led even to the winning-a-prize ball set covering 44 through the ball entrance 30, and it gathers in a predetermined part. The starting storage Light Emitting Diode 26 is formed in the part which covered and retreated to the game board rear-face side of the lower part of a member 31. Thus, since [ which bulged ahead ] it covers and the starting storage Light Emitting Diode 26 is formed immediately in the bottom of a member 31, visitor light from lighting fitting prepared in the ceiling etc. cannot be in charge of the starting storage Light Emitting Diode 26 easily, and a bird clapper is prevented that it is hard to check the display state of these Light Emitting Diodes by looking. The information-display section for displaying predetermined information other than the aforementioned identification information by this starting storage Light Emitting Diode 26 is constituted. 37 in drawing -- a guard plate and 29 -- a wiring drawer -- a hole, and 36 and 38 -- a Light Emitting Diode substrate and 33 -- a cover -- a member -- it is a trim

[0015] The drum unit 46 is attached in the back side of a drum ornament unit by the attachment boss 45 really formed in the winning-a-prize ball set covering 44. The drum unit 46 is built in in the drum case 47 free [ rotation of three drums 53a, 53b, and 53c (53a and 53c are not visible on a drawing) ]. The rotation drive of each drums 53a, 53b, and 53c is carried out at each by the drum motors (stepping motor) 52a, 52b, and 52c (52a and 52c are not visible on a drawing). 51 in drawing is a lamp substrate and is for switching on the light or blink controlling each drum lamps 22a-22i. The drum seals 54a, 54b, and 54c (54a and 54c are not visible on a drawing) are stuck on the periphery of each drums 53a, 53b, and 53c. The liquid crystal sheet 56 (refer to drawing 4 ) and the transparent drum lens 39 (39b) are arranged in the front-face side of each of these drums 53a, 53b, and 53c, and it is constituted so that a game person can expand and see the pattern currently drawn on the drum seals 54a-54c through the openings 38a-38c (refer to drawing 4 ) by which the decision system is carried out to the Light Emitting Diode substrate 38. The adjustable display which can adjustable display two or more kinds of identification information (pattern) is constituted by the pattern displays 3a-3c containing these openings 38a-38i. For 48, as for a drum sensor substrate and 58, case covering and 49 are [ a hit line drop (hit train Light Emitting Diode) and 50 ] relay substrates among drawing.

[0016] Drawing 4 is a decomposition perspective diagram for explaining the structure of the drum ornament unit 43. Mainly, the drum ornament unit 43 covers with the attachment substrate 27, and consists of a member 31, the drum lens 39, a liquid crystal sheet 56, and a Light Emitting Diode substrate 38. the attachment substrate 27 -- a display window 28 and a wiring drawer -- the hole 29 and the ball entrance 30 are formed a wiring drawer -- the number-of-times drop 25 of Kaisei is formed in the front-face side of a hole 29 It decorates from the rear-face side of this attachment substrate 27, and Light Emitting Diode23 is attached, and it is constituted so that trim Light Emitting Diode23 which has a game person in this attachment state from a front side can be checked by looking. Trim Light Emitting Diode23 attached in the Light Emitting Diode substrate 36 is further attached in the rear-face side of the attachment substrate 27, and it is constituted so that the luminescence mode of trim Light Emitting Diode23 which has a game person in an attachment state from a front side may be covered and it can check by looking through a member 31. Screw stop fixation of the guard plate 37 is further carried out from the rear-face side of the attachment substrate 27.

[0017] It covers in the front-face side upper part of this attachment substrate 27, and a member 31 is attached in it. It is constituted so that this winning-a-prize ball that the display window 32 and the winning-a-prize mouth 12 are formed in the member 31 by covering, and won a prize of the

winning-a-prize mouth 12 in the state of the attachment to the attachment substrate 27 can pass through the ball entrance 30. this cover -- the display window 34 was formed in the front-face side of a member 31 -- covering -- a member -- a trim 33 is attached this cover -- a member -- the trim seal 35 which has non-area-pellucida 35a and area-pellucida 35b is stuck on the front-face side of a trim 33 the attachment state of the trim seal 35 -- a cover -- a member -- while being hidden so that the screw for attaching a trim 33 may not appear from a front-face side by non-area-pellucida 35a, a game person will be in the state which can check the number-of-times drop 25 of Kaisei by looking through display windows 32 and 34 and area-pellucida 35b

[0018] The drum lens 39 is attached in the display window 28 of the attachment substrate 27. As for this drum lens 39, left figure handle expansion section 39a, inside pattern expansion section 39b, and right figure handle expansion section 39c are formed. further -- this drum lens 39 -- Light Emitting Diode insertion -- the starting storage Light Emitting Diode 26 prepared in the Light Emitting Diode substrate 38 which the hole 40 is formed and is attached from the rear-face side of the drum lens 39 -- the Light Emitting Diode insertion -- it is prepared in the state where it was inserted in the hole 40

[0019] The liquid crystal sheet 56 is formed in the rear-face side of this drum lens 39. The liquid crystal display sections 56a-56i are formed in this liquid crystal sheet 56, and the predetermined liquid crystal display section of the liquid crystal display sections 56a-56i is controlled by a light-transmission state or the optical cut off state based on the control signal given through wiring 57.

[0020] The Light Emitting Diode substrate 38 is arranged in a rear-face side by the pan of the liquid crystal sheet 56. Two or more openings 38a-38i are formed in this Light Emitting Diode substrate 38. Where the Light Emitting Diode substrate 38 and the liquid crystal sheet 56 are attached in the attachment substrate 27, it is constituted so that the position of two or more openings 38a-38i and the position of the liquid crystal display sections 56a-56i may be in agreement. In this Light Emitting Diode substrate 38, two or more hit line drops (hit train Light Emitting Diode) 58 are formed, and as mentioned above, when the combination (for example, 777) of identification information used as the time of reach or great success is organized, it switches on the light or blinks.

[0021] Drawing 5 and drawing 6 are operation explanatory drawings for explaining an operation of a liquid crystal sheet. As for liquid crystal display section 56a (-56i) of the liquid crystal sheet 56, liquid crystal 62 is enclosed in this capsule 61 including the capsule 61 of many transparent polymers. the transparent conducting film 60 prepares in the front face and rear face of liquid crystal display section 56a (-56i) -- having -- \*\*\*\* -- this transparent conducting film 60 -- plastic film 59 is further formed in the front-face and rear-face side Since the light which liquid crystal 62 is irregularly located in a line, and carries out incidence to the liquid crystal sheet 56 diffuses the liquid crystal sheet 56 of this structure by liquid crystal 62 as shown in drawing 6 when voltage is not applied between the transparent conducting films 60 of two sheets which sandwich liquid crystal, the liquid crystal sheet 56 will be in an opaque state. On the other hand, if voltage is applied to the transparent conducting film 60, as shown in drawing 5 , a liquid crystal molecule will align by electric field, and the light which carries out incidence to the liquid crystal sheet 56 will penetrate as it is. Therefore, while not applying voltage, when it changes into an opaque state and voltage is applied, it will be in a transparent state, and control modulated light can be carried out, respectively.

[0022] Drawing 7 is the block diagram showing the control circuit used for a pachinko game machine. The microcomputer 71 of a pachinko game machine has the function which controls operation of the various devices described below. For this reason, it consists of LSI of a number chip and a microcomputer 71 contains in it ROM73 which stores the program data of MPU72 and MPU72 of operation which can perform control action in a predetermined procedure, and RAM74



which can perform writing and read-out of required data.

[0023] Furthermore, a microcomputer 71 contains the I/O circuit 75 outputted outside in response to the data output from MPU72 while giving input data to MPU72 in response to an input signal, the power-on-reset circuit 77 and the clock generation circuit 78, the pulse frequency divider (reset pulse generating circuit) 79, the address decoding circuit 80, and the sound generator 76.

[0024] the clock signal to which the pulse frequency divider 79 is given from the clock generation circuit 78 -- dividing -- carrying out -- being periodical (every [ for example, ] 2msec(s)) -- a reset pulse is given to MPU72. The address decoding circuit 80 decodes the address data from MPU72, and gives a chip selector signal to ROM73, RAM74, the I/O circuit 75, and the sound generator 76, respectively.

[0025] In addition, in this example, when ROM73 is produced, the rewriting, i.e., need, for the content, the programmable ROM 73 which can change the program data for MPU72 stored in it is used. And MPU72 answers the input of each control signal described below according to the program data stored in this ROM73, and gives a control signal to various devices.

[0026] The following signals are given to a microcomputer 71 as an input signal.

[0027] If a hit ball wins a prize of the starting winning-a-prize mouths 10a, 10b, and 10c and the starting winning-a-prize ball is detected by the starting winning-a-prize ball detectors 11a, 11b, and 11c (refer to drawing 1), the detecting signal will be inputted into a microcomputer 71 through a detector 81. If the pachinko ball which advanced into adjustable winning-a-prize sphere equipment 4 wins a prize of the specific winning-a-prize field 8 (refer to drawing 1) and is detected by the specific winning-a-prize ball detector (V switch) 90, the detecting signal will be inputted through a detector 81. If the winning-a-prize ball which won a prize in adjustable winning-a-prize sphere equipment 4 is detected by the winning-a-prize number detector (10 count switch) 91, the detecting signal will be inputted through a detector 81. The criteria position established in the drum which rotates with each stepping motors 52a-52c is detected by the drum sensors 49a, 49b, and 49c formed in the drum sensor substrate 49, and the criteria position detecting signal is inputted through a detector 81.

[0028] A microcomputer 71 outputs a control signal to the following devices. A roll control signal is outputted to stepping motors (drum motor) 52a-52c through the motorised circuit 82. The control signal for solenoid excitation is outputted to a solenoid 6 through the solenoid drive circuit 83. The control signal for a display is given to the drum lamps 22a-22i and the ornament lamps 16-21 through the lamp drive circuit 84, respectively. The control signal for a display is outputted to the starting winning-a-prize storage drop 26, the hit line drop (hit train Light Emitting Diode) 58, an ornament 23 and Light Emitting Diodes 24, the winning-a-prize number drop 9, and the number-of-times drop 25 of Kaisei through a segment and the Light Emitting Diode drive circuit 85, respectively. A control signal is outputted to the liquid crystal sheet 56 through the LCD drive circuit 86. The control signal for sound generating is outputted to a loudspeaker 88 through amplifier 87.

[0029] Moreover, it connects with the AC power supply of AC24V, and the power circuit 89 which generates the voltage of two or more kinds of direct current is contained in the control circuit 70.

[0030] Drawing 8 or drawing 19 is a flow chart for explaining operation of the control circuit shown in drawing 7, drawing 8 shows the flow chart of a main program, and drawing 9 or drawing 19 shows the flow chart of a sub routine program.

[0031] The main routine program shown in drawing 8 is performed once for example, every 2msec(s). The pulse frequency divider 79 of drawing 7 answers the reset pulse generated once every 2msec(s), and this execution is started. First, stack set processing is made by Step S(only henceforth S) 1, and judgment whether there was any RAM error by S2 is performed. This judgment reads the

content of the predetermined address of RAM74 shown in drawing 7 , and is performed by investigating whether the value is equal to a predetermined value. Immediately after the time of the overrun of a program, or powering on, since the storing data of RAM74 are unfixed, the answer of judgment serves as NO and control progresses S3. In S3, an initial data is written in RAM74. Control progresses to S8 after that. Since an initial data is written in in S3, at the time of execution of this main routine, the answer of the judgment in S2 serves as YES henceforth, and control progresses to direct S4.

[0032] In S4, processing which outputs predetermined data to the I/O circuit (I/O) 75 is performed, and it progresses to S5. In S5, judgment whether there was any 10 count drum error is performed. 10 count error judges whether the above occurred in the winning-a-prize number detector 58 or the specific winning-a-prize ball detector 57 as a result of the check by S27 and S28 which are mentioned later. A drum error means the case where it changes into the state where a roll control cannot be carried out when a rotating drum stops on the way. When such an error occurs, it progresses to S7 directly, without performing process processing by S6, and switch input process which inputs the detecting signal from various detectors is performed. On the other hand, when there is no 10 count drum error, after [ S7 ] process processing by S6 is performed, it progresses. Next, processing which updates the counted value of random 1 counter and random 2 counters is performed by S8. The thing for the primary lottery whose random 1 counter are for determining and mentions later whether this random 1 counter and random 2 counters are made into the combination (for example, 777) of the specific identification information in which great success generates the display result at the time of a halt of the adjustable display 3, and random 2 counters are [ which is mentioned later ] for a secondary lottery. Moreover, random 2 counters are made to serve a double purpose in order to determine a halt pattern when it is decided that it will be great success so that it may mention later. Next, it progresses to S9 and that judgment whose number of times of reset is any of "0", "4", and "1, 2, 3, 5, 6, 7" is performed. This number of times of reset means the number of times reset according to the fixed reset pulse emitted from the aforementioned pulse frequency divider 79, whenever it is reset, stepping of every one is carried out from "0", and after amounting to "7", it is set to "0" by carrying out stepping further. When the number of times of reset is "0", it progresses to S10, and sound data are outputted from a loudspeaker 88. When the number of times of reset is "4", it progresses to S12, selection of an output data table and processing which sets each data of hit train Light Emitting Diode-LCD and a drum lamp are performed, and each data of set Light Emitting Diode [ its ], LCD, and drum lamp is outputted by S13 from the I/O circuit 75. Based on the outputted data, as mentioned above, the display control of this line drop (hit train Light Emitting Diode) 58, the liquid crystal display sections 56a-56i, and the drum lamps 22a-22i is carried out. On the other hand, when the number of times of reset is any of "1, 2, 3, 5, 6, 7", it progresses to S11, each data of trim Light Emitting Diode and a lamp is set, and the set data is outputted by S13 from the I/O circuit 75.

[0033] Next, it progresses to S14, and winning-a-prize storage area storing processing is performed, it progresses to S15, and an update process of random 1 counter, random 2 counters, and random 3 counters is performed. This processing of S15 performs processing to S1-S14 within the time (2msec) reset by the pulse frequency divider 79, and is performed using the reset latency time which is the remaining time. Therefore, since the processing time to S1-S14 becomes random, as a result of the processing time by S15 also becoming random and performing the update process by S15, the counted value of random 1 counter, random 2 counters, and random 3 counters will take a random value.

[0034] Drawing 9 is a flow chart which shows the sub routine program of the process processing shown by S6. Distinction of to what value the process flag is set by S16 is performed. This process

flag is set to each value by S48, S54, S53, S59, S65, S68, S72, S74, S76, S80, and S81 grade which are mentioned later, and it is needed in order to control a pachinko game machine, maintaining predetermined control time. The program performed as shown in drawing 9 according to the value of a process flag is different. Processing is usually performed, and when [ which is depended S17 in the case of "0" ] it is "1", check processing of random 2 counters by S18 is performed. In the case of "2", great success pattern set processing by S19 is performed, and when it is "3", blank pattern set processing by S20 is performed. In the case of "4", drum rotation start processing by S21 is performed. In the case of "5, 6", drum rotation processing by S22 is performed, and when it is "7, 8", great success check processing by S23 is performed. In the case of "9, 10", processing under opening by S24 (9 before V winning a prize and 10 after V winning a prize) is performed, and when it is "11, 12", processing is performed after opening by S25 (finishing [ 11 is V un-winning a prize, and / 12 / V winning a prize ]).

[0035] Drawing 10 is a flow chart which shows the sub routine program of the switch input process shown in S7. Processing which inputs the detecting signal of various detectors from the switch port of the I/O circuit 75 is performed by S26. Next, error checking of 10 count switch (winning-a-prize number detector 91) is performed by S27. This 10 count switch error checking \*\*\*\* the case of an open circuit and short-circuit of the winning-a-prize number detector 91, or a \*\*\*\* ball, and it becomes an error when the detection output of the winning-a-prize number detector 91 is drawn continuously more than a predetermined time (for example, 2.9 seconds). Next, it progresses to S28 and error checking of V switch (specific winning-a-prize ball detector 90) is performed. It is an open circuit and the short check of the specific winning-a-prize ball detector 90, and this V switch error checking also serves as an error, when the detecting signal from the specific winning-a-prize ball detector 90 is drawn more than a predetermined time (for example, 2.9 seconds). Next, it progresses to S29 and judgment whether there is any 10 count drum error is made. While judging whether it was abnormal as a result of the check by this judgment HA S27 and S28, it judges whether there was any drum error explained by S5. And although a sub routine program is completed as it is when there is a 10 count drum error, when there is nothing, it progresses to S30, and judgment whether the starting switch was turned on [ it ] is performed. In the case of this example, as a starting switch, there are three kinds of detectors of the starting winning-a-prize ball detectors 11a, 11b, and 11c, and while multiple-times execution of the sub routine program of this switch input process is carried out, each one detector of every is judged. And when it is judged that the starting switch is turned on, it progresses to S32, and judgment whether it is ON judging timing is performed. If a pachinko ball wins a prize of a starting winning-a-prize mouth and the starting winning-a-prize ball is detected by the starting winning-a-prize ball detector, whenever the detection pulse which has predetermined pulse width will be drawn from the starting winning-a-prize ball detector and the sub routine of this switch input process will be performed during the time of the pulse width of the detection pulse, judgment of YES is continuously performed by S30. The on-counter corresponding to the starting winning-a-prize ball detector judged to be ON whenever [ the ] counts up, and judgment of YES will be made by S32 if the counted value reaches a predetermined value (for example, "3"). On the other hand, a starting winning-a-prize ball detector may be momentarily turned on [ it ] by the noise resulting from static electricity etc., and, in such a case, the pulse signal almost near zero is outputted for pulse width from a starting winning-a-prize ball detector. When judgment of S30 is performed according to the outputted timing, judgment of YES is made by S30 and "1" addition of the corresponding on-counter is carried out. However, though the value of an on-counter is set to "1" in that case, since the value of an on-counter is not the aforementioned predetermined value (for example, "3"), judgment of NO is made by S32. And in case the sub routine program of this switch input process is performed next time (after 2msec),

since the detection pulse which originated in the noise and was detected from the starting winning-a-prize ball detector is in the state where it already fell, the value of the on-counter which judgment of NO is made by S30 and corresponds by S31 is cleared, and it is set to "0." Thus, though it originates in a noise and a momentary pulse signal is outputted from a starting winning-a-prize ball detector, since judgment of NO is made by S32, the judgment of a purport in which the starting winning-a-prize ball detector carried out starting winning-a-prize ball detection is not performed, and there is an advantage which can prevent the incorrect judging by the noise.

[0036] Next, since it is difficult more to memorize when it progresses to S33 when judgment of YES is made by S32, and judgment whether starting winning-a-prize storage is the maximum (for example, 4) is performed and it has already become the maximum Although it progresses to S35 then, since it is still possible to memorize when it is not the maximum, while progressing to S34 and carrying out "1" addition of the number of starting storage, processing which carries out "1" addition of the number of starting winning a prize is performed. Next, judgment whether all starting checks were completed is performed by S35. As mentioned above, since there are three kinds of starting winning-a-prize ball detectors, judgment whether the check of all three kinds of starting winning-a-prize ball detectors was completed is performed, when there is a starting winning-a-prize ball detector which the check has not ended yet, it progresses to S30 again, and a check is performed by these S35. And judgment of YES is made by S35 in the stage which the check of all starting winning-a-prize ball detectors ended.

[0037] Drawing 11 is a flow chart which was shown in S12 and which hits and shows the sub routine program of a train data set. When it is, while judgment whether there was any 10 count drum error is performed like the above-mentioned, it progresses to S38 and the data set at the time of alarm is performed by S36, the data for turning OFF a solenoid 6 are set, and the set data is outputted by the aforementioned S4. The data at the time of this alarm are the data for generating beep sound from a loudspeaker 88, data for making opaque altogether the liquid crystal display sections 56a-56i of the liquid crystal sheet 56, etc. Moreover, since the data which turn OFF a solenoid are set and outputted, the opening-and-closing board 5 of adjustable winning-a-prize sphere equipment 4 is closed, and it will be in the 2nd disadvantageous state for a game person.

[0038] Next, when it is judged that there is no 10 count drum error, it progresses to S37, and the data for controlling the hit trains Light Emitting Diode and LCD of the corresponding address and a drum lamp according to the value of a process flag are set, and the set data is outputted by S13. When the adjustable display 3 displays [ adjustable ] the contents of this data set (process flag =5), the data for turning on altogether the drum lamps 22a-22i, carrying out lighting movement of the hit train Light Emitting Diode 58 and the ornament 23 and Light Emitting Diodes 24, and changing altogether the hit train LCD (liquid crystal display sections 56a-56i) into a transparent state are set. moreover, to the case at the time of reach (process flag =6) The drum lamp on the hit line (combination effective train) in which possibility that the combination of specific identification information will be organized remains is blinked. Make other drum lamps switch off and the hit train Light Emitting Diode 58 is made to turn on one by one according to the halt timing of a right drum. The data which make a transparent state the hit train LCD (liquid crystal display section) on the hit line (combination effective train) in which possibility that the combination of specific identification information will be organized remains, and make the other hit trains LCD an opaque state are set. Moreover, it sets in the stage (process flag =8) after the combination of the aforementioned specific identification information is organized, before adjustable winning-a-prize sphere equipment 4 carries out Kaisei. The drum lamps 22a-22i are controlled like the case at the time of the aforementioned reach. The data for performing the same control as the time of the aforementioned reach with which the combination of the aforementioned specific identification

information was organized are set in the hit train LCD (liquid crystal display sections 56a-56i) by hitting and blinking the hit train Light Emitting Diode 58 on a line (combination effective train).

[0039] Drawing 12 is a flow chart which shows the sub routine program of the winning-a-prize storage area storing processing shown in S14. Judgment whether the number of starting winning a prize is "0" is performed by S39. This number of starting winning a prize is added "1" every with the above S34, and is subtracted "1" every by S41 mentioned later. Although a sub routine program is completed as it is when the number of starting winning a prize is "0", when there is the number of starting winning a prize, it progresses to S40, and processing which stores the value of random 1 counter and random 2 counters in the area where a winning-a-prize storage area corresponds is performed. This starting winning-a-prize storage area has two or more area for memorizing the value of each random 1 counter, and the value of random 2 counters according to the number of starting winning-a-prize storage while having the area for counted value storing of random 1 counter, and the area for counted value storing of random 2 counters. next, he progresses to S41 and the processing which carries out "1" subtraction of the number of starting winning a prize should do -- until it progresses to S39 and the number of starting winning a prize is set to "0" -- this S -- processing of 40 and 41 is repeated By this winning-a-prize storage area storing processing, the value of random 1 counter and the value of random 2 counters corresponding to it are stored in each winning-a-prize storage area for every starting winning a prize.

[0040] Drawing 13 is a flow chart which was shown in S17 and which usually shows the sub routine program of processing. Judgment whether there is any winning-a-prize storage is performed by S42. This winning-a-prize storage is added "1" every with the above S34, and is subtracted "1" every by S55 mentioned later. When there is no winning-a-prize storage, it progresses to S43, and " sets a primary lottery flag to gap", and a sub routine program is completed as it is. On the other hand, when there is winning-a-prize storage, it progresses to S44, and the counted value of random 1 counter memorized in the area 1 of a winning-a-prize storage area and the counted value of the random 1 present counter are added, and the judgment of being a hit is performed based on the value of the result. The area 1 of a winning-a-prize storage area is area which stores the oldest counted value among the counted value stored with the above S40, and the judgment by S44 is performed based on the counted value old No. 1. In these S44, the counted value old No. 1 and the counted value of the random 1 present counter are added, and since it is made for a hit of a primary lottery to judge a gap based on the addition result, compared with judging only based on the counted value of random 1 counter stored in the area 1 of a winning-a-prize storage area, random nature improves more. Next, it progresses to S45, judgment whether it is per result of a primary lottery is performed, when it is judged that it does not hit and come out, it progresses to S46, and " sets a primary lottery flag to gap", and it progresses to S48. the case where it is judged as a hit on the other hand -- S47 -- progressing -- a primary lottery flag -- per [ " ] -- " -- it sets and progresses to S48 In S48, the processing which sets a process flag to "1" is made. Consequently, check processing of random 2 counters shown in S18 below is performed.

[0041] Drawing 14 is a flow chart which shows the sub routine program of check processing of random 2 counters shown in S18. S49 -- a primary lottery flag -- per [ " ] -- " -- judgment whether it has become or not carries out -- having -- per [ " ] -- " -- when having not become, it progresses to S53 On the other hand, when it is "a hit", it progresses to S50, and the value of random 2 counters stored in the area 1 of a winning-a-prize storage area is judged, and judgment whether the judgment result of the secondary lottery is a hit is performed by S51. When judged as a blank, it progresses to S52, and " sets a primary lottery flag to gap", and it progresses to S53. On the other hand, when it is judged that it is per result of a secondary lottery, it progresses to S54, and the processing which a great success pattern number is set based on the value of random 2 counters of the area 1 of a

winning-a-prize storage area, and sets a process flag to "2" is made, and it progresses to S55.

[0042] In S53, processing which sets a process flag to "3" is performed. In S55, processing which carries out "1" subtraction of the number of starting winning-a-prize storage is performed. Next, it progresses to S56 and processing which shifts a winning-a-prize storage area is performed. The winning-a-prize storage area is constituted as are mentioned above, and have two or more area for storing two or more counted value corresponding to the number of starting winning a prize, respectively, the oldest counted value is stored in area 1, counted value old to the degree is stored in area 2 and the still older counted value to the degree is stored in area 3. And processing which shifts and stores in area 3 the counted value which shifts and stores in area 2 the counted value which shifts and stores in area 1 the counted value which eliminates the counted value stored in area 1, and is stored in area 2 by these S56, and is stored in area 3, and is stored in area 4 is performed.

[0043] Drawing 15 is a flow chart which shows the sub routine program of the great success pattern set shown in S19, and when the process flag is set to "2" (i.e., when judged as per result of a secondary lottery), it is performed. Based on a great success pattern number (S54 reference), the great success pattern corresponding to the number is set by S57. Next, processing which it progresses to S58, and hit string data is set, and sets a great success flag to "reach" and "great success" is performed. Next, it progresses to S59 and processing which sets a process flag to "4" is performed. Consequently, in next processing, it will progress to S21 in drawing 9, and drum rotation start processing will be performed.

[0044] It is the flow chart which shows the sub routine program of the blank pattern set (S23 reference) performed when, as for drawing 16, a process flag is set to "3" by S53, namely, when the result of a primary lottery or a secondary lottery is determined as a gap. A blank pattern is set by S60 based on the counted value of random 3 counters. Progress to S61 and judgment whether the set left figure handle and inside pattern are an equal pattern is performed. Although it progresses to S65 if it has not been an equal pattern, when it has been an equal pattern (i.e., when it will be in a reach state), it progresses to S62, and hit string data is set, and a great success flag is set to "reach." Next, when it becomes equal by chance, it progresses to S64, "1" addition only of the right figure handle is carried out, and it can shift compulsorily, and although it progresses to S63, and it progresses to S65 if judgment whether a left figure handle, an inside pattern, and a right figure handle are equal is performed and it is not equal, it controls so that a pattern does not become the combination of specific identification information. Next, a process flag is set to "4" in S65. Consequently, in next processing, processing of a drum rotation start shown in S21 will be performed.

[0045] Drawing 17 is a flow chart which shows the sub routine program of a drum rotation start shown in S21. Processing which initializes motor control area is performed by S66. This motor control area is area which memorizes the enumerated data which carried out counting of the number of times of detection of the criteria position of each drum which rotates with stepping motors 52a, 52b, and 52c based on the detection output of the drum position transducers 49a, 49b, and 49c, and the storage value of this area is initialized by S66. Next, it progresses to S67 and selection of whether next drum turnover time is made into a canonical mode based on the number of winning-a-prize storage (S34, S55 reference) or to make it an express mode is performed. When this number of winning-a-prize storage is beyond a predetermined value (for example, "2"), an express mode is chosen, and a canonical mode is chosen when it is under a predetermined value. The time which that there is the number of winning-a-prize storage beyond a predetermined value means the case where adjustable control of the adjustable display 3 did not meet the deadline to the increase in starting winning a prize of a hitted ball, but the number of winning-a-prize storage exceeds a predetermined value, shortens the turnover time of a drum in such a case, and an adjustable display

control takes is shortened, and it is controlled by carrying out an adjustable display efficiently to be able to digest the number of winning-a-prize storage efficiently. Next, it progresses to S68 and a process flag is set to "5." Consequently, processing of drum rotation of S22 is performed in next processing.

[0046] Drawing 18 is the sub routine program of the drum rotation processing shown in S22.

Control processing of stepping motors 52a-52c is performed by S69. Control processing of this stepping motor carries out halt control of the stepping motor, preparing time difference in right order into the left, after rotating a comparatively long time stepping motor based on the canonical mode or express mode chosen with the above S67, when the canonical mode is chosen. On the other hand, when the express mode is chosen, after the rotation start of the stepping motor is carried out and comparatively short time passes, halt control of each stepping motor is carried out in order of the left, inside, and the right, preparing time difference. Thus, although it shifts [ when the canonical mode is chosen, ] to halt control after an adjustable start is carried out, and a condition precedent is satisfied, when comparatively long time passes, when the express mode is chosen, after an adjustable start is carried out, a predetermined condition precedent is satisfied by the comparatively short passage of time, and it shifts to halt control of adjustable display. The adjustable display-control means which is made to indicate the aforementioned adjustable display by adjustable, and halt time is changed and carries out halt control of two or more aforementioned adjustable displays by S66-S69 based on formation of a predetermined condition precedent is constituted. Next, it progresses to S70 and judgment whether the left of a rotating drum and inside are rotating is performed, and if it is still under rotation, a sub routine program will be completed as it is. On the other hand, when rotation with a left drum and an inside drum stops, it progresses to S71, and judgment whether the great success flag is set to "reach" is performed. When the great success flag is set to "reach" with the above S58 or S62, after progressing to S72 and setting a process flag to "6", it progresses to S73. On the other hand, when the great success flag is not set to "reach", it progresses to S73 as it is. After this left drum and the inside drum have stopped, when the great success flag is set to "reach", the data for controlling the hit train LCD at the time of the reach explained with the above S37 are set. Consequently, only the liquid crystal display section on the hit line (combination effective train) in which possibility that the combination of specific identification information will be organized among the hit trains LCD (liquid crystal display sections 56a-56i) remains is transparent. It is covered by the state where adjustable displays other than the hit line in which possibility that the other liquid crystal display sections will be opaque, and the combination of a specific game state will be organized judging from the display result of a stopped adjustable display remains cannot be checked by looking. A cover means cover in the state where of adjustable displays other than the adjustable display on the combination effective train in which possibility that the combination of the aforementioned specific identification information will be organized judging from the display result of a stopped adjustable display in the stage in which a part of two or more aforementioned adjustable displays are still indicating by adjustable by the liquid crystal sheet 56 and the LCD drive circuit 86 which have this cover function remains cannot be checked by looking is constituted.

[0047] Next, it progresses to S73, judgment whether all drums stopped is performed and it progresses to S74 in the stage which all drums stopped, and processing which sets a process flag to "7", shifts to a process timer and sets a time delay is performed, and it progresses to S75. This blank time delay is the time for about about 1 second, and it can be held at a idle state, and all drums shift to a game person in the meantime, and can come out [ judgment of NO can be made by S77 later mentioned between this set time delay, ], and it can make a certain thing check. Although a sub routine program is completed as it is in S75 when judgment whether the great success flag is

"becoming it a great success" is made and it is not "becoming it a great success", processing which progresses to S76 when it is "becoming it a great success", sets a process flag to "8", and sets the time before first time opening to a process timer is performed. The time before this first time opening is the time for about about 4 seconds, and while maintaining the state where judgment of NO was made by S77 later mentioned during the time before this set first time opening, and the drum stopped in the meantime, the control for changing the drive control of the adjustable winning-a-prize sphere equipment 4 into the 1st state is delayed.

[0048] Next, when the process flag is set to "7" or "8", processing of the great success check of S23 is performed.

[0049] Drawing 19 is a flow chart which shows the sub routine program of great success check processing of S23. Judgment whether the process timer was completed is performed by S77, it progresses to S78 in the stage which the process timer ended, and the output data for turning OFF a stepping motor are set, and when this set data is outputted by S4, stepping motors 52a-52c are turned off [ them ]. Next, it progresses to S79, judgment whether the great success flag is "becoming it a great success" is performed, when it is not "becoming it a great success", it progresses to S80, and a process flag is set to "0", and usual processing of the above S17 is started again. On the other hand, when the great success flag is "becoming it a great success", it progresses to S81, and V winning-a-prize flag is cleared, a process flag is set to "9", a released time (30 seconds) is set to a process timer, and processing which sets the number-of-times counter of opening to "1" is performed. When this V winning-a-prize flag is set when a pachinko ball wins a prize of the specific winning-a-prize field 8 and is detected by the specific winning-a-prize ball detector 90, and this V winning-a-prize flag is set, after the 1st state of adjustable winning-a-prize sphere equipment is completed, recurrence continuation control which changes the drive control of the adjustable winning-a-prize sphere equipment into the 1st state again is performed. The number of times of this recurrence continuation control counts up by the number-of-times counter of opening, and it is controlled so that recurrence continuation control beyond it is not performed in the stage to which the counted value reached the predetermined value (for example, "16"). Furthermore, since a released time (30 seconds) is set to a process timer by these S81, although a solenoid 6 is excited for a maximum of 30 seconds and the opening-and-closing board 5 of adjustable winning-a-prize sphere equipment 4 will be in the Kaisei state during a maximum of 30 seconds by it If the pachinko ball of the predetermined number (for example, ten pieces) wins a prize in adjustable winning-a-prize sphere equipment between them and it is detected by the winning-a-prize number detector 91, excitation of a solenoid 6 will be stopped at the time, and the opening-and-closing board 5 will close.

[0050] Drawing 20 is the front view showing other examples of adjustable display. This adjustable display 100 uses a dot matrix Light Emitting Diode. Two or more pattern displays 102a-102i of the adjustable display 100 are constituted by the dot matrix Light Emitting Diode 101. And if it becomes at the time of the reach mentioned above, as shown in (B), adjustable displays other than the adjustable display on the combination effective train in which possibility that the combination of specific identification information will be organized judging from the display result of the adjustable display of a idle state remains will be switched to the state where identification information is not displayed. This change control for example, when it is judged that the great success flag is set to "reach" with the above S71 The data which nothing displays to the dot matrix Light Emitting Diode of adjustable displays other than the adjustable display on the hit train (combination effective train) in which possibility that the combination of the specific identification information will be organized judging from the display result of the adjustable display of a idle state remains are set. It controls to output the set data by S13.



[0051] Drawing 21 is the front view showing the example of further others of adjustable display. This adjustable display 110 uses a liquid crystal display, and two or more pattern displays 112a-112i are constituted by the segment LCD 111. And at (A), the state where only a left figure handle stops and an adjustable indication of an inside pattern and the right figure handle is given is shown, by (B), a left figure handle and an inside pattern stop and the state where only the right figure handle is indicating by adjustable is shown. And in this (B), after the left figure handle and the inside pattern have stopped, "7" and "7" are located in a line on the slanting diagonal line, and the reach state mentioned above is materialized. To be shown in (B) at the time of this reach, it is controlled so that the display of adjustable displays other than the adjustable display on the combination effective train (the lower right is a hit train on the slanting diagonal line of \*\*) in which possibility that the combination of specific identification information will be organized judging from the display result of the adjustable display of a idle state remains disappears.

[0052] What is necessary is to set the data which nothing displays on adjustable displays other than the adjustable display on the combination effective train in which possibility that the combination of specific identification information will be organized judging from the display result of the adjustable display of a idle state remains, and just to also control the control at the time of the reach in the adjustable display using the liquid crystal display shown in this drawing 21 to output by S4, when judgment of YES is made with the above S71.

[0053] In addition, it may replace with carrying out by erasing the display of a predetermined adjustable display and being unable to check identification information by looking in the adjustable display 100,110 shown in drawing 21 and drawing 22 at the time of reach, and you may carry out by the ability not checking identification information by looking by making an ornament display perform to the predetermined adjustable display.

[0054]

[Effect of the Invention] this invention is the stage in which two or more kinds of adjustable displays [ a part of ] are still indicating by adjustable. A game person can judge now easily from the display result of the adjustable display which is carrying out [ aforementioned ] a halt of whether possibility that the combination of the aforementioned specific identification information will be organized on which combination effective train remains. The hope by approaching later on the combination of the specific identification information to which the display state of adjustable display is becoming it a great success in a stage can be made to experience certainly by the game person.

[0055] And it will be in the state where the aforementioned effect can be demonstrated only by adding a cover means to conventional adjustable display and its conventional adjustable display-control means, and the conventional adjustable display and its control means can be used effectively as much as possible.

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[Translation done.]

**\* NOTICES \***

**Japan Patent Office is not responsible for any damages caused by the use of this translation.**

1. This document has been translated by computer. So the translation may not reflect the original precisely.

- 2.\*\*\*\* shows the word which can not be translated.  
 3.In the drawings, any words are not translated.

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## DESCRIPTION OF DRAWINGS

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### [Brief Description of the Drawings]

[Drawing 1] It is the front view showing the game field of the pachinko game machine of an example of a game machine.

[Drawing 2] It is the whole adjustable display front view.

[Drawing 3] It is drawing of longitudinal section of the adjustable display of an attachment state.

[Drawing 4] It is a decomposition perspective diagram for explaining the structure of a drum ornament unit prepared in adjustable display.

[Drawing 5] It is operation explanatory drawing for explaining an operation of the liquid crystal sheet used for adjustable display.

[Drawing 6] It is operation explanatory drawing for explaining an operation of the liquid crystal sheet used for adjustable display.

[Drawing 7] It is the block diagram showing the control circuit used for a pachinko game machine.

[Drawing 8] It is the flow chart which shows the main routine for explaining operation of the control circuit shown in drawing 7 .

[Drawing 9] It is the flow chart which shows the sub routine program of process processing.

[Drawing 10] It is the flow chart which shows the sub routine program of switch input process.

[Drawing 11] It is the flow chart which shows the sub routine program of hit train data set processing.

[Drawing 12] It is the flow chart which shows the sub routine program of winning-a-prize storage area storing processing.

[Drawing 13] Usually, it is the flow chart which shows the sub routine program of processing.

[Drawing 14] It is the flow chart which shows the sub routine program of random 2 counter check processing.

[Drawing 15] It is the flow chart which shows the sub routine program of great success pattern set processing.

[Drawing 16] It is the flow chart which shows the sub routine program of blank pattern set processing.

[Drawing 17] It is the flow chart which shows the sub routine program of drum rotation start processing.

[Drawing 18] It is the flow chart which shows the sub routine program of drum rotation processing.

[Drawing 19] It is the flow chart which shows the sub routine program of great success check processing.

[Drawing 20] It is the whole front view showing other examples of adjustable display.

[Drawing 21] It is the whole front view showing the example of further others of adjustable display.

### [Description of Notations]

In 3, adjustable display, and 3a, 3b and 3c hit, in a pattern display, and 22a-22i, a drum lamp and 58 hit, and, for the liquid crystal display section and 86, as for a microcomputer and 4, a Light Emitting Diode drive circuit and 71 are [ the Rhine drop and 56 / a liquid crystal sheet and 56a-56i / adjustable winning-a-prize sphere equipment and 2 ] game fields.

[Translation done.]

**\* NOTICES \***

Japan Patent Office is not responsible for any damages caused by the use of this translation.

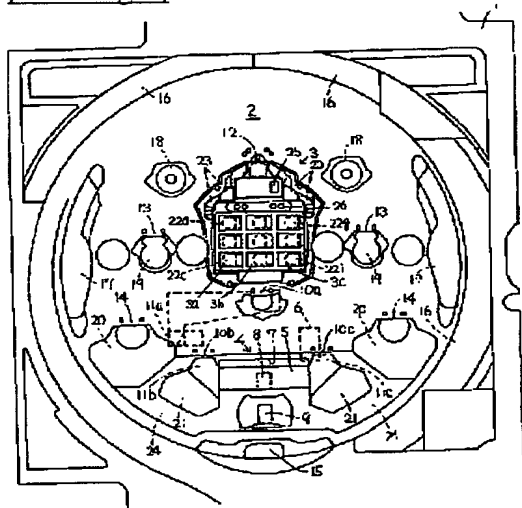
1. This document has been translated by computer. So the translation may not reflect the original precisely.

2. \*\*\*\* shows the word which can not be translated.

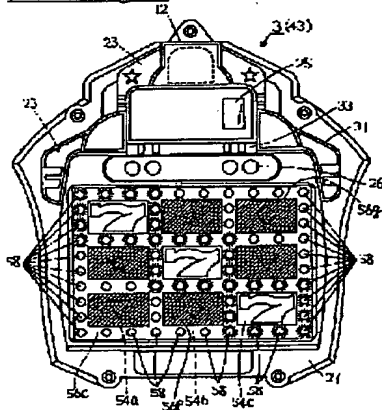
3. In the drawings, any words are not translated.

**DRAWINGS**

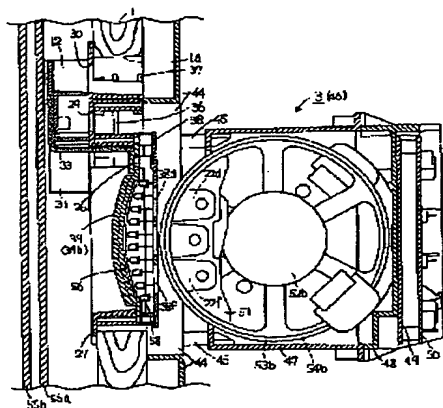
[Drawing 1]



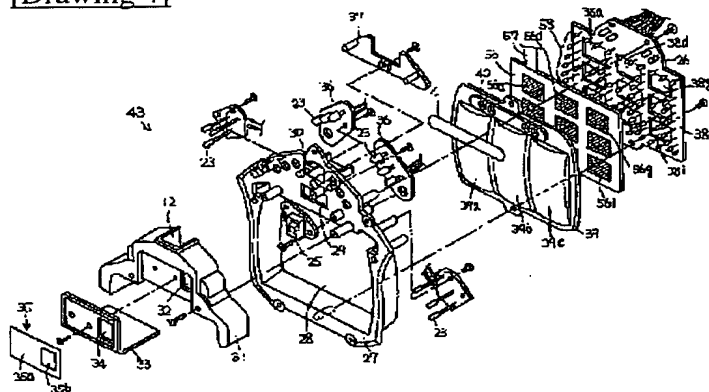
[Drawing 2]



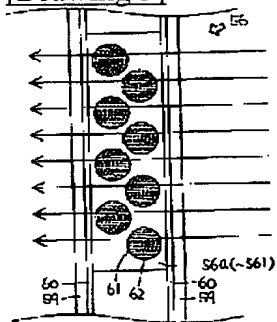
[Drawing 3]



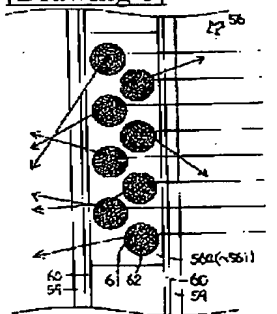
[Drawing 4]



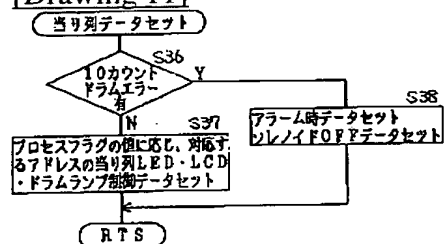
[Drawing 5]



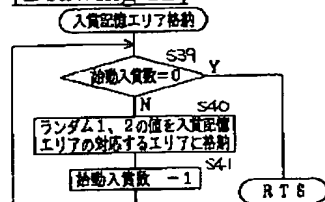
[Drawing 6]



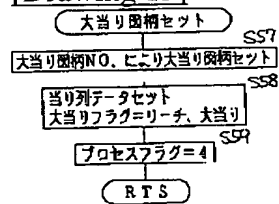
[Drawing 11]



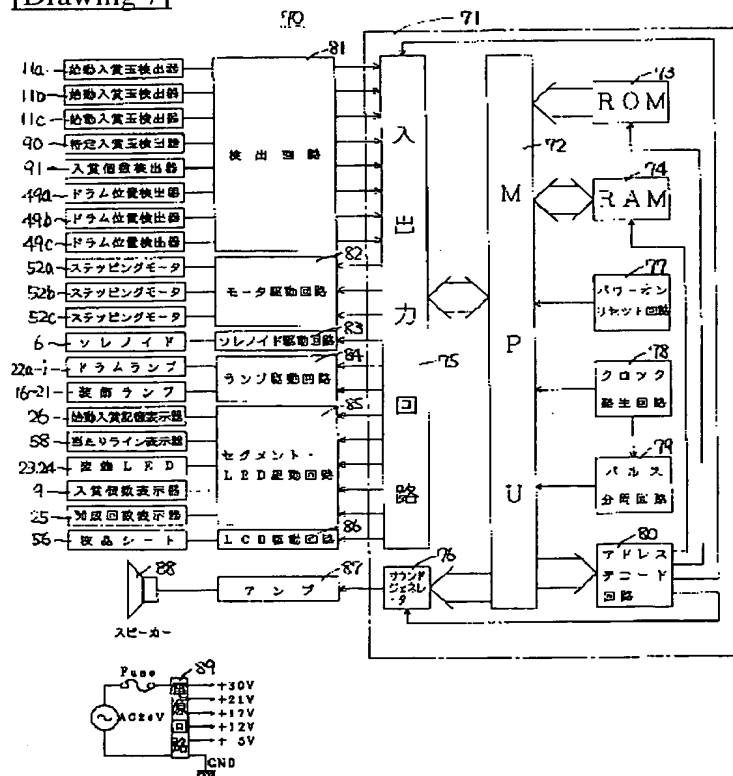
[Drawing 12]



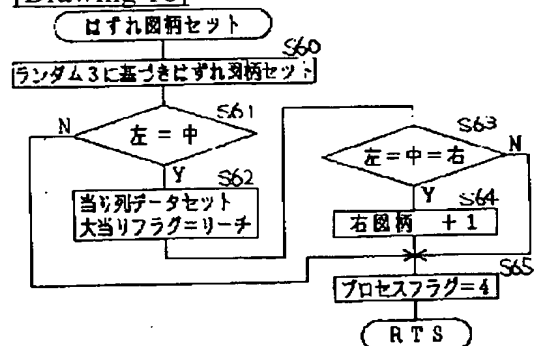
[Drawing 15]



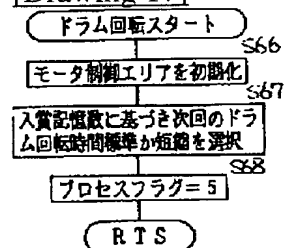
[Drawing 7]



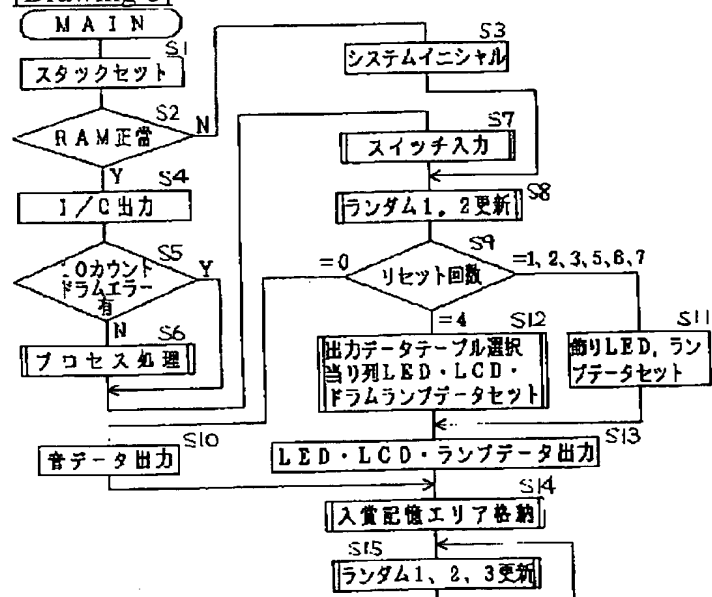
[Drawing 16]



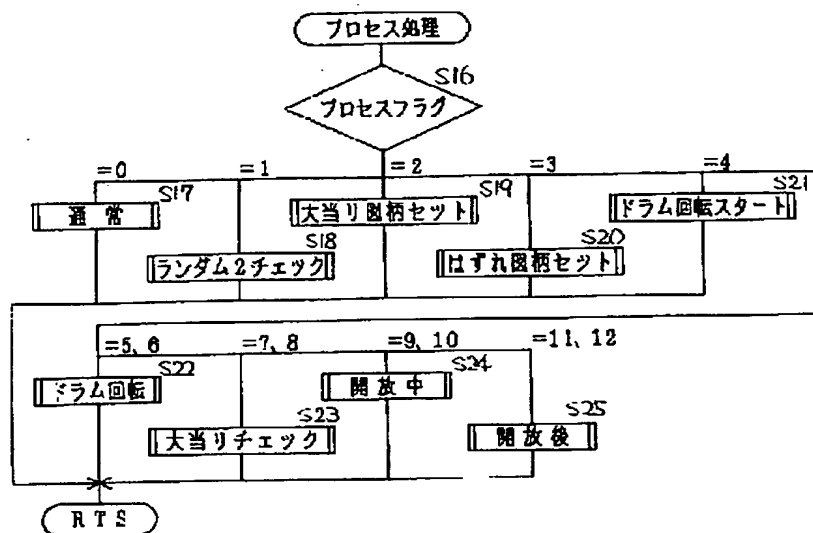
[Drawing 17]



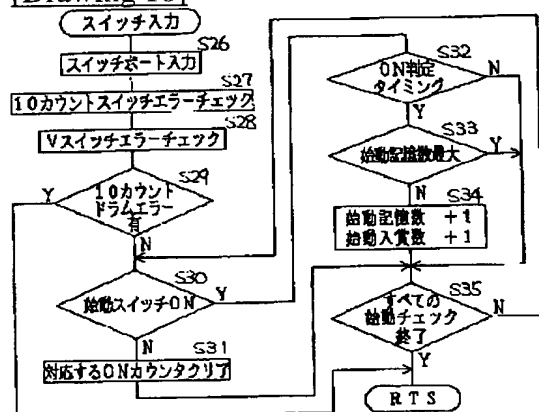
[Drawing 8]



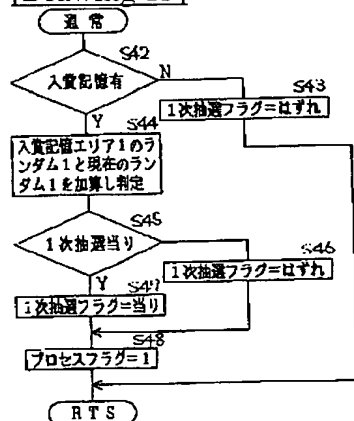
[Drawing 9]



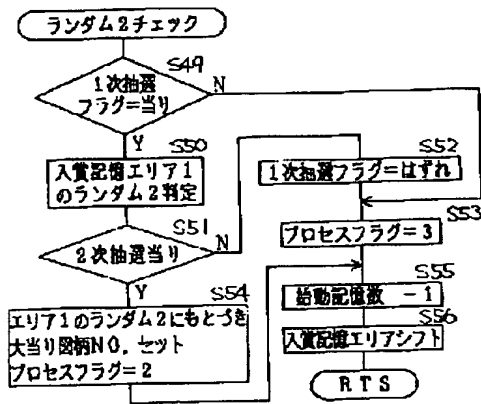
[Drawing 10]



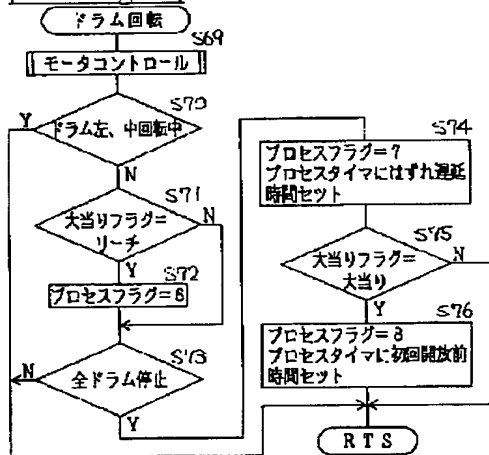
[Drawing 13]



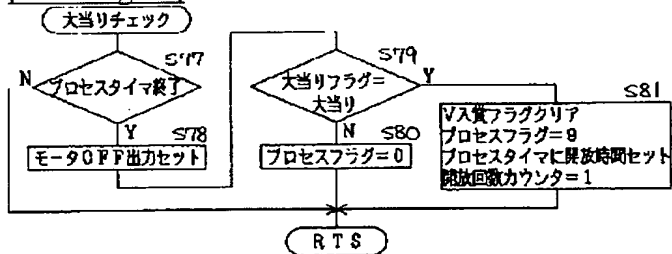
[Drawing 14]



[Drawing 18]

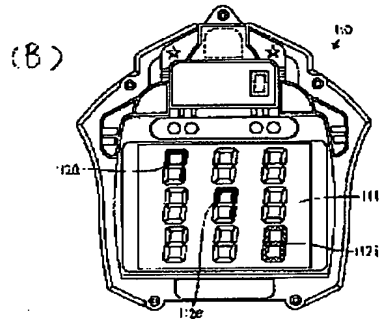
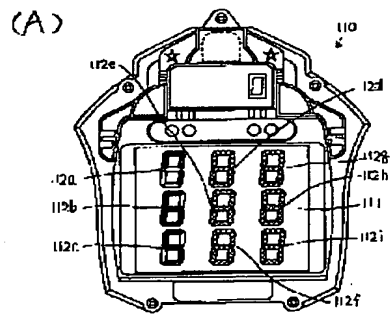


[Drawing 19]

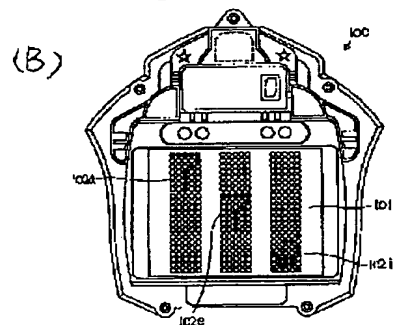
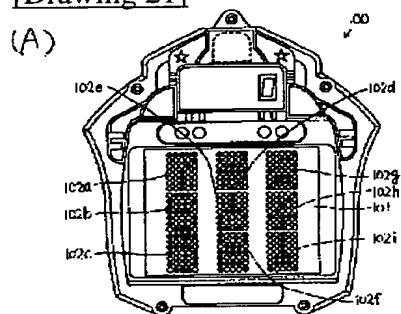


[Drawing 20]





[Drawing 21]



[Translation done.]